

7 JUN 1982

NOTE TO: Information Handling Systems Architect, DDA

FROM:

[redacted]
Chief, Building Planning Staff, OL

STAT

SUBJECT: Systems Availability

Bob,

Equipped with the results of the [redacted] study, I am now in possession of keen hindsight. This has developed from reflecting upon why knowing utilities reliability has contributed so little to knowing what effect there is on ADP reliability.

STAT

What I see is a previously subconscious assumption on my part, and I suspect on the part of many others, that there is statistical independence between ADP, communications, and utilities. This is evidenced by our thoughts on managing systems availability by allocating availability goals to each of these major subsystems.

Assuming independence between commo and ADP seems reasonable. Malfunctions in either seldom produces failure in the other. However, utilities failures clearly have a significant impact on the electronics of both. Therefore, there is a significant statistical dependence between electronics and utilities we have yet to define mathematically.

I don't envy anyone the task of defining the relationship, but it needs to be done if we are ever to be able to predict total systems performance. I'm dropping this thought on you because it represents an R&D effort that logically should fit under your systems umbrella and be sponsored by your organization.

STAT

OL/BPS,

[redacted]
(7June1982)

STAT